TED STATES PATENT AND TRADEMARK OFFICE

Applicants:

Katsumasa Nonoshita, et al.

Serial No.

10/582,564

Filed:

June 12, 2006

For: NOVEL 2-HETEROARYL-SUBSTITUTED

BENZIMIDAZOLE DERIVATIVE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

To Be Assigned Art Unit:

Examiner:

To Be Assigned

INFORMATION DISCLOSURE STATEMENT **UNDER 37 CFR 1.97**

Sir:

- In compliance with 37 C.F.R. 1.97, submitted on the attached form herewith is a list of patents, publications or other information which are requested to be made of record in this application. This Information Disclosure Statement is not an admission that any patent, publication or other information referred to herein is "prior art" for this invention. In accordance with 37 C.F.R. 1.97(h), the filing of this Information Disclosure Statement shall not be construed to be an admission that the information cited in the Statement is, or is considered to be, material to patentability as defined in 37 C.F.R. 1.56(b).
- In accordance with 37 C.F.R. 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made.
- 3. Applicants respectfully request that the Examiner initial the attached form after reviewing the pertinence of each reference.
- Pursuant to 37 C.F.R. 1.98 (a)(2)(ii), copies of each cited U.S. patent and each U.S. patent application publication are not enclosed herewith.

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450, on the date appearing below.

MERCK & CO., INC.

ng Date <u>3-23-07</u>

NFORMATION DISCLOSURE STATEMENT

5. Pursuant 37 C.F. 298(d), copies of references listed on the attached form that were submitted to or cited by the Office in a related application upon which the instant application relies for an earlier filing date under 35 U.S.C. 120 are not enclosed. Related application(s) in which references were submitted to or cited by the Office are as follows:

	RELATED A	RELATED APPLICATION				
U. S. SERIAL NUMBER	FILING DATE	MERCK CASE				
If this is inconvenient, additional copies will be submitted upon	l request.					
6. In accordance with 37 C.F.R. 1.97, (check one)						
the attached information is filed within three months of the f	iling date of the captioned case					
the attached information is filed more than three months aft Office Action on the merits.	er the ming date but prior to the	Thailing of a first				
the attached information is filed before the mailing of a first examination under §1.114.	Office action after the filing of a	request for continued				
the attached information is being filed more than three mon Office Action on the merits, but before the mailing date of a otherwise closes prosecution in the application. The enclos Account No. 13-2755 for the fee required under 37 C.F.R. 1	Final Action, Notice of Allowanised authorization is therefore given	ce, or an action that				
each item of information contained in this Information Disclosion a foreign patent office in a counterpart foreign applicat Statement.						
each item of information contained in the information disclo a foreign patent office in a counterpart application and this designated in §1.56(c) more than thirty days prior to the filing	communication was not receive	ed by any individual				
no item of information contained in this Information Disclosuration patent office in a counterpart foreign application, and after making reasonable inquiry, was known to any individual months prior to the filing of this Statement.	d, to the knowledge of the perso	on signing the certification				
	Respectfully submitted By: Richard C. Billips Attorney For A	pplicant(s)				
	Reg. No. 31,916					
	MERCK & CO., INC. Patent Dept., RY60-30					
	P.O. Box 2000					
	Rahway, N.J. 07065-09	907				
	(732)594-4683	107				
	Date: $4/43$	104				

	Substitute for form 1449A/PTO		COMPLETE IF KNOWN			
INFORMATIONEDISCLOSURE				Application Number	10/582,564	
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	STATEMENT BY MAR 26	TOT.	PLICANT \$	First Named Inventor	Katsumasa Nonoshita, et al.	
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Sheet	1	of	2	Attorney Docket Number	BY0034YP	

U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No.	U.S. Patent Document Kind Code (if known)		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	
	1	US 3,598,123		Alejandro Zaffaroni	08/10/1971	
	2	US 3,536,809		Norman Applezweig	10/27/1970	
	3	US 3,845,770		Theeuwes et al	11/05/1974	
	4	US 3,916,899		Theeuwes et al	11/04/1975	
	5	US 4,008,719		Theeuwes et al	02/22/1977	
	6	US 6,040,449		Tsuchiya et al	03/21/2000	
	7	US 6,239,152 B1		Gordeev et al	05/29/2001	
	8	US 7,064,215 B2 Equivalent to		Renhowe et al	06/20/2006	
		WO 2003/4488				
	9	US 2005/0272740 A1				
		Equivalent to WO2004/017963				
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	FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No.	Office	Foreign Patent Docur Number	ment Kind Code (if known)	Name of Patentee or Ap of Cited Documen		Date of Publication of Cited Document MM-DD-YYYY
	1		JP2000 26430		Taisho Pharma Co Ltd		01/25/2000
	2		EP 0 726 260 A1		American Cyanamid Comp	any	08/14/1996
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Substitute for form 1449B/PTO		COMPLETE IF KNOWN			
INFORMATION DISCLOSURE STATEMENT BY APPLICANT		Application Number	10/582,564		
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				Group Art Unit	To Be Assigned
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Sheet	2	of	2	Attorney Docket Number	BY0034YP

	NON PATENT LITERATURE DOCUMENTS						
Examiner Initials*	Cite No.	Include name of the author, title, date, page(s), volume-issue number(s) and place of publication.					
	1	Grupe, A. et al., "Transgenic Knockouts Reveal a Critical Requirement for Pancreatic B Cell Glucokinase in Maintaining Glucose Homeostasis", Cell, Vol 83, pp 69-78, 1995					
	2	Mitsunobu, O., "The Use of Diethyl Azodicarboxylate and Triphenylphosphine in Synthesis and Transformation of Natural Products", Synthesis, Vol 1, pp 1-28, 1981					
	3	Tani, Junichi, et al., "Studies on biologically Active Halogenated Compounds IV Synthesis and Antibaterial Activity of Fluorinated Quinoline Derivatives", Chemical and Parmaceutical Bulletin, Vol 30, pp 3530-3543, 1982					
	4	Tasneem, et al., "Ammonium Nickel Sulphate Mediated Nitration of Aromatic Compounds with Nitric Acid", Synthetic Communications, Vol 31 (7), pp 1123-1127, 2001					
	5	Fonseca, T. et al., "A short synthesis of phenanthrol[2,3-d]imidazoles from dehydroabietic acid. Application of the methodology as a convenient route to benzimidazoles" Tetrahedron, Vol 57, pp 1793-1799, 2001					
	6	Singh, M.P. et al., "Synthetic Utility of Catalytic Fe(III)/Fe(II) Redox Cycling Towards Fused Heterocycles: A Facile Access to Substituted Benzimidazole, Bis-benzimidazole and Imidazopyridine Derivatives" Synthesis, Vol 10, pp 1380-1390, 2000					
	7	Singh, S.P. et al., "Reaction of 2-hydrazinobenzimidazole with B-diketones: A structural reinvestigation" Indian Journal of Chemistry, Vol 32, pp 262-265, 1993					
	8	Ferre, T. et al., "Correction of diabetic alterations by glucokinase", Proc. Natl. Acad. Sci, Vol 93, pp 7225-7230, 1996					
	9	Glaser, B. et al., "Familial Hyperinsulinism Caused by an Activating Glucokinase Mutation" The new England Journal of Medicine, Vol 338, pp 226-230, 1998					
	10	Dolle, F. et al., "Synthesis and Nicotinic Acetylcholine Receptor in Vivo Binding Properties of 2-Fluoro-3-[2(S)-2-azetidinylmethoxy]pyridine: A New Positron Emission Tomography Ligand for Nicotinic Receptors" J. Med. Chem, Vol 42, pp 2251-2259, 1999					
	11	Sitzmann, M. E. et al., "Fluronitroanilines Reaction Control via Hydrogen Bonding", J. Org. Chem, Vol 43, (6), pp 1241-1243, 1978					
	12	Vionnet, N. et al., "Nonsense mutation in the glucokinase gene causes early-onset non-insulin-dependent diabetes mellitus" Nature, Vol 356, pp 721-722, 1992					
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Examiner Signature	/Valerie Rodriguez-garcia/	Date Considered	01/27/2009
Signature	/ Valorio i todriga oz. garcia/	Considered	